Frequently Asked Questions

FAQs for cancer advocates.

What is EDRN and why was it created?

The core mission of the Early Detection Research Network (EDRN) is to help detect cancer early. EDRN was formed specifically to bring a collaborative approach to the discovery and development of early detection biomarkers.

How is that done and why is that important?

Biological markers (biomarkers) can be present in blood, urine, sputum, or tissues. Early detection biomarkers can be found in specific genes; in genetic mutations; in proteins expressed by genes; and in biochemical metabolites. These markers serve as indicators of early cancer, or of risk for cancer.

Describe the history of biomarkers

In the last 30 years, the overall cancer mortality rate did not change significantly primarily because when cancer was detected, it was found late in the carcinogenesis process.

For the first time, three clinical trials have moved forward to test biomarkers for the early detection of liver, bladder, and prostate cancer as a result of the EDRN's work during the last 5 years. Clinical trials of other markers for different organs are in the pipeline.

What is EDRN's role with regards to biomarkers?

EDRN is the first comprehensive network to develop and validate early detection markers for cancer. It is a consortium of more 300 investigators, 40 private or academic institutions, and it represents divergent scientific disciplines including genomics, informatics, and public health. Federal collaborators include NIST, CDC, JPL, FDA and other NCI programs.

EDRN is at a junction of taking the discoveries made and determining if there are good clinical applications for them.

Discovery leads to work that confirms and improves the accuracy of the biomarker, which then moves quickly to early clinical validation of the test. Before EDRN, each part of this process was separate from the next step, and this slowed scientific progress. Through EDRN, investigator initiated projects are combined with a strong administrative and data infrastructure that requires and supports information sharing and collaboration among individuals and organizations.

How does EDRN related to NCI's mission?

EDRN is now a driving force behind intergovernmental, inter−institutional and public−private collaboration−building for the rapid advancement of biomarkers and early detection science and the translation to clinical applications. This approach is fundamental to the NCI's challenge goal of eliminating the suffering and death due to cancer.

How can patients and advocates help EDRN?

Cancer advocates can support the EDRN's mission by helping spread the word about the need for accrual to two major clinical trials:

- ◊ DCP Validation Study, a prospective study to determine the sensitivity and specificity of DCP for the detection of early HCC; compare the accuracy of DCP and AFP for the detection of early HCC; and determine whether demographic or etiology of underlying liver disease alter the expression of DCP or AFP.
- ◊ Detection of Bladder cancer by Microsatellite Analysis (MSA), a prospective study in which the results of MSA will be evaluated for both recurrent tumors as well as for anticipation of subsequent recurrent disease.

The ultimate challenge is to help divergent scientists and institutions work together to bring useful biomarkers to clinical applications.